#### Remarks

Claims 113-123 have been canceled. Claims 1-112 remain pending in this application.

The Examiner has required restriction between groups of claims in the above-identified application as follows:

Group I: Claims 1-20, drawn to a radiation patternable functional material;

Group II: Claims 21-37, drawn to a compound;

Group III: Claims 38-63, drawn to a radiation definable ink;

Group IV: Claims 64-73, drawn to a method of making a radiation patternable

functional material;

Group V: Claims 74-91, drawn to a method of making a compound;

Group VI: Claims 92-112, drawn to a method of making an electronically

functional thin film; and

Group VII: Claims 113-123, drawn to a thin film structure.

Applicants have elected, with traverse, Group I, Claims 1-20, drawn to a radiation patternable functional material.

Restriction is proper only when the groups of claims are (A) independent or distinct as claimed, and (B) there is a serious burden on the Examiner (M.P.E.P. § 803). Claims are independent when there is no disclosed relationship between them; for example, a process and an apparatus that is incapable of being used in practicing the process (M.P.E.P. § 802.01). Claims are distinct when they are related as disclosed, but are capable of separate manufacture, use or sale as claimed, AND ARE PATENTABLE (novel and unobvious) OVER EACH OTHER (M.P.E.P. § 802.01; emphasis in original). Examiners must provide reasons and/or examples in support of their conclusions (M.P.E.P. § 803).

In this case, the various relationships between the claims in Group I-VI above have been mischaracterized, and the burden of persuasion has not been met with regard to providing logically or legally adequate reasons and/or technically or factually accurate examples in support of the many conclusions of distinctness and/or unrelatedness. Furthermore, by virtue of canceling Claims 113-123 (Group VII), restriction between Group VII and other Groups is most. As a result, the Restriction Requirement is improper and/or most, and should be withdrawn.

# The Relationship between the Claims in Groups I and II Has Been Mischaracterized

The relationship between the claims in Groups I and II has been mischaracterized. The Examiner has concluded that the claims of Groups I and II are unrelated, because the compound is not required to be employed in a radiation sensitive material, and the radiation sensitive material does not require the specifically claimed compound. This reasoning overlooks the language of the claims and the standards for restriction as set forth in M.P.E.P. §§ 802.01 and 803. Thus, the reasons and/or examples in support of the conclusion of unrelatedness are technically and factually inaccurate and logically and legally inadequate.

For example, claim 1 (Group I) is drawn to a radiation patternable functional material, comprising ligands containing a photoreactive group or a group that is reactive with a photochemically generated species and that, after first-order photoreaction or reacting with said photochemically generated species, materially changes the solubility characteristics of said material in a developer. Claim 21 (Group II) is drawn to a compound containing a group that is photoreactive or that is reactive with a photochemically generated species and which, after first-order photoreaction or reacting with said photochemically generated species, materially changes the solubility characteristics of said compound in a developer. This language from Claim 21 is nearly identical to that in Claim 1 and clearly indicates that the compound of Claim 21 is patternable with light, a well-known form of radiation. Thus, the reason(s) and/or example(s) provided in support of restriction are, at least in part, technically and factually inaccurate.

The Examiner cites MPEP §§ 806.04 and 808.01 for the principle that inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. Assuming that this principle was the basis for the conclusion of unrelatedness, it is clear from the language of claims 1 and 21 that the reasoning behind such a conclusion is logically and legally inadequate. By the language of claims 1 and 21 cited in the preceding paragraph, claims 1 and 21 (and, consequently, all claims dependent therefrom in Groups I and II) are capable of use together and they have a common mode of operation, a common function, and a common effect.

Thus, limitations common to claims 1 and 21 appear to have been overlooked. As a result, the relationship between the claims in Groups I and II has been mischaracterized, and the reason(s) and/or example(s) provided in support of the conclusion of unrelatedness are logically and legally inadequate. Consequently, the reason(s) and/or example(s) do not carry the burden of persuasion in support of restriction, and restriction would appear to be improper on this basis.

### The Relationship Between the Claims in Groups I and III Has Been Mischaracterized

The relationship between the claims in Groups I and III has been mischaracterized. The Examiner has concluded that the claims of Groups I and III are distinct because, in the Examiner's opinion, the ink could be made employing a different photosensitive material and/or the material of Group I is not required to be employed in an ink. This reasoning overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 38 (Group III) is drawn to a radiation definable ink, comprising the material of Claim 1 (Group I). Based on the language of claim 38, it is not known how the ink of Group III could be made employing a photosensitive material other than the material of Claim 1 (Group I). Thus, the first reason and/or example relied upon for supporting restriction and the conclusion of distinctness is technically and factually inaccurate.

Furthermore, restriction on the basis that the material of Group I (containing independent Claim 1) is not required to be employed in the ink of dependent Claim 38 (Group III) falls rather short of legal requirements for restriction. Requiring restriction in such a manner is analogous to requiring restriction between any dependent claim and the independent claim from which it depends. By definition, a dependent claim (such as Claim 38, Group III) further limits the subject matter of an independent claim (such as Claim 1, Group I) and thus, has a narrower scope than the independent claim. As a result, by definition, all of the subject matter of an independent claim is not required (and, in fact, cannot be) employed in a dependent claim. If this was a proper legal standard for restriction, the only time restriction could not be required between two claims is when they have exactly the same scope, in which case one of the two claims could be properly rejected under either 35 U.S.C. § 112, fourth paragraph, for failure to further limit a claim, or under 35 U.S.C. § 101 for statutory double patenting. Such logic and/or reasoning, if correct or appropriate, would enable the U.S. Patent and Trademark Office to limit every patent effectively to a single claim. Thus, the alternative reason and/or example given in support of restriction and the conclusion of distinctness (the material of Group I is not required to be employed in the ink of Group III) is logically and legally inadequate.

Thus, it appears that at least some of the language in claim 38 has been overlooked, and as a result, the reason(s) and/or example(s) provided in support of the conclusion of unrelatedness are technically and factually inaccurate and logically and legally inadequate. Consequently, the relationship between the claims in Groups I and III has been mischaracterized, and the reason(s) and/or example(s) do not carry the burden of persuasion in support of restriction between Groups I and III. Restriction would appear to be improper on this basis.

# No Plausible or Accurate Reason or Example in Support of Restriction Between the Claims in Groups I and IV Has Been Provided

The relationship between the claims in Groups I and IV has been mischaracterized. The Examiner has concluded that the claims of Groups I and IV are distinct, because the process (of

Group IV) is generic and could be employed to prepare many other materials having different compositions than that of Group I. This reasoning is technically and factually inaccurate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, claim 64 (Group IV) is drawn to a "method of making the material of Claim 1" (Group I). Based on the language of claim 64, it is not known how the method of Group IV could be used to make a material having a composition that differs from that of Claim 1 (Group I). Thus, the reason(s) and/or example(s) relied upon for supporting restriction and the conclusion of distinctness are technically and factually inaccurate.

Thus, the language in Claim 64 has been overlooked, and the relationship between the claims in Groups I and IV has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of restriction and the conclusion of distinctness are technically and factually inaccurate and logically and legally inadequate. Consequently, the reason(s) and/or example(s) given do not carry the burden of persuasion in support of the conclusion of distinctness between Groups I and IV, and restriction would appear to be improper on this basis.

### The Relationship Between the Claims in Groups I and V Has Been Mischaracterized

The relationship between the claims in Groups I and V has been mischaracterized. The Examiner has concluded that the claims of Groups I and V are unrelated because, in the Examiner's opinion, the groups are quite different and there is no relation between the radiation sensitive material of Group I and the method of making a compound of Group V. This reasoning is technically and factually inaccurate and legally and logically inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803. In fact, it appears that the conclusion of unrelatedness has been merely restated as a reason and/or example in support of finding the same.

In any case, Claim 74 (Group V) is drawn to a "method of making the compound of Claim 21" (Group II). As explained above, Claim 21 (Group II) is drawn to a compound containing a group that is photoreactive or that is reactive with a photochemically generated species and which, after first-order photoreaction or reacting with said photochemically generated species, materially changes the solubility characteristics of said compound in a developer. Claim 1 (Group I) is drawn to a radiation patternable functional material, comprising ligands containing a photoreactive group or a group that is reactive with a photochemically generated species and that, after first-order photoreaction or reacting with said photochemically generated species, materially changes the solubility characteristics of said material in a developer, language nearly identical to that in claim 21 and clearly indicating a mode of operation, a function, and an effect common with the compound of Claim 21 (Group II). Because of the common mode of operation, function and effect(s), the material of Claim 1 (Group I) and the compound of Claim 21 (Group II) are clearly capable of use together. Many of the compounds of Claim 21 (Group II) are encompassed by the material of Claim 1 (Group I). The overlap between the compounds of Claim 21 (Group II) and the material of Claim 1 (Group I) is unmistakable. Thus, it is clear that the method of Claim 74 (Group V) can be used to make a great number of the materials encompassed by Claim 1 (Group I).

Consequently, the statement to the effect that Groups I and V are quite different and there is no relation between them is technically and factually inaccurate. Based on the language of Claims 1, 21 and 74, the method of Claim 74 (Group V) is clearly related to the material of Claim 1 (Group I). Thus, the reason(s) and/or example(s) provided in support of restriction are technically and factually inaccurate, and the conclusion of distinctness in reliance on such reason(s) and/or example(s) is logically and legally inadequate.

Thus, the language of Claim 74 and limitations common to Claims 1 and 21 have been overlooked, and the relationship between the claims in Groups 1 and V has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of restriction do not carry the burden of persuasion in support of the conclusion of unrelatedness between Groups I and V. Restriction would appear to be improper on this basis.

### The Relationship Between the Claims in Groups I and VI Has Been Mischaracterized

The relationship between the claims in Groups I and VI has been mischaracterized. The Examiner has concluded that the claims of Groups I and VI are unrelated, because the material may be coated onto a substrate and used to form a pattern in and of itself. This reasoning overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 92 (Group VI) is drawn to a method of making an electronically functional thin film, comprising irradiating the ink of Claim 38 (Group III). As explained above, Claim 38 is drawn to a radiation definable ink, comprising the material of Claim 1 (Group I). Thus, Claim 92 depends indirectly from Claim 1. Thus, the conclusion that the claims of Groups I and VI are unrelated is technically and factually inaccurate.

The reasoning and logic supporting the conclusion of unrelatedness between Groups I and VI is analogous to requiring restriction between any two claims in which one claim depends indirectly from the other. By definition, an indirectly dependent claim (such as claim 92, Group VI) incorporates limitations from a dependent claim that are not present in an independent claim (such as claim 1, Group I). In theory, any claim that depends indirectly from an independent claim can be rewritten as a directly dependent claim without affecting the scope of the claim. As a result, if the logic supporting restriction between Groups I and VI was correct or appropriate, the U.S. Patent and Trademark Office would be able to limit every patent to independent and directly dependent claims. However, one can easily imagine the large number of patents issued by the U.S. Patent and Trademark Office that contain indirectly dependent claims. Thus, the reason(s) and/or example(s) given in support of restriction and the conclusion of unrelatedness are logically and legally inadequate.

The fact that Claim 92 (Group VI) depends indirectly from Claim 1 (Group I) appears to have overlooked. As a result, the reason(s) and/or example(s) provided in support of restriction and the conclusion of unrelatedness are logically and legally inadequate and technically and factually incorrect. Consequently, the Examiner's reason(s) and/or example(s) do not earry the

burden of persuasion in support of the conclusion that Groups I and VI are unrelated, and restriction would appear to be improper on this basis.

### Restriction Between Groups I and VII Is Moot

As a result of the cancellation of Claims 113-123, restriction between the claims in Groups I and VII is moot.

## The Relationship Between the Claims in Groups II and III Has Been Mischaracterized

The Examiner has mischaracterized the relationship between the claims in Groups II and III. The Examiner has concluded that the claims of Groups II and III are unrelated because, in the Examiner's opinion, the groups are drawn to two distinct inventions, the compound of Group II is not required to be used in the printing ink, nor does the printing ink (presumably of Group III) require the use of the compound. This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 38 (Group III) is drawn to a radiation definable ink (rather than a printing ink), comprising the material of Claim 1 (Group I). As explained above, Claim 1 (Group I) is drawn to a radiation patternable functional material, comprising ligands containing a photoreactive group or a group that is reactive with a photochemically generated species and that, after first-order photoreaction or reacting with said photochemically generated species, materially changes the solubility characteristics of said material in a developer. Similarly, Claim 21 (Group II) is drawn to a compound containing a group that is photoreactive or that is reactive with a photochemically generated species and which, after first-order photoreaction or reacting with said photochemically generated species, materially changes the solubility characteristics of said compound in a developer, language nearly identical to that in Claim 1 and clearly indicating a mode of operation, a function, and an effect common with the material of Claim 1 (Group I).

Because of the common mode of operation, function and effect(s), the material of Claim 1 (Group I) and the compound of Claim 21 (Group II) are clearly capable of use together. Also, as explained above, many of the compounds of Claim 21 (Group II) are encompassed by the material of Claim 1 (Group I), and the overlap between the compounds of Claim 21 (Group II) and the material of Claim 1 (Group I) is unmistakable. Thus, it is clear that the ink of Claim 38 (Group III) is related to the compound of Claim 21 (Group II), and the statement to the effect that Groups II and III are unrelated is technically and factually inaccurate.

MPEP §§ 806.04 and 808.01 are cited for the principle that inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. Assuming this principle was a basis for the conclusion of unrelatedness, it is clear from the language of Claims 1, 21 and 38 that the conclusion is logically and legally inadequate.

Thus, the language of Claim 38 and limitations common to Claims 1 and 21 appear to have been overlooked, and the relationship between the claims in Groups II and III has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of restriction do not carry the burden of persuasion in support of the conclusion of unrelatedness between Groups II and III. Restriction would appear to be improper on this basis.

### The Relationship Between the Claims in Groups II and IV Has Been Mischaracterized

The relationship between the claims in Groups II and IV has been mischaracterized. The Examiner has concluded that the claims of Groups II and IV are unrelated because, in the Examiner's opinion, the compound of Group II is not required to be used in any photosensitive material, nor does the method (presumably that of Group IV) of making the material require the use of that specific compound. This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 64 (Group IV) is drawn to a "method of making the material of Claim 1" (Group I). Claim 64 (Group IV) does not contain any language or limitations requiring use of something in a photosensitive material. Thus, the statement to the effect that the compound of Group II is not required to be used in any photosensitive material bears no relation to restriction between Groups II and IV, and appears to be somewhat nonsensical in this context. However, as explained above, the subject matter of Claim 1 (Group I) is quite clearly and unmistakably related to the subject matter of Claim 21 (Group II). Thus, the method of Claim 64 (Group IV), which is directed to making the materials of Group I, is also related to the compound of Claim 21 (Group II), and any conclusion of unrelatedness between Groups II and IV is technically and factually inaccurate.

MPEP §§ 806.04 and 808.01 are cited for the principle that inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. Assuming this principle was a basis for the conclusion of unrelatedness, it is clear from the language of Claims 1, 21 and 64 that the conclusion is logically and legally inadequate.

Furthermore, the alternative reason and/or example in support of restriction between Groups II and IV (the method of making the material does not require the use of the specific compound) does not apply the proper or correct legal standard. The alternative example appears to suggest that as long as the scope of the compounds in the restricted claims is different, restriction is proper. Such logic is similar to that justifying restriction between an independent claim and claims dependent therefrom (e.g., as discussed above). According to the Examiner's own reasoning, restriction is proper when the groups are unrelated. As explained above, Groups II and IV are related. Thus, the reason(s) and/or example(s) relied upon for supporting the conclusion of unrelatedness are technically and factually inaccurate and logically and legally inadequate, and the relationship between the claims in Groups II and IV has been mischaracterized.

As a result, the reason(s) and/or example(s) provided in support of restriction do not carry the burden of persuasion in support of the conclusion of unrelatedness between Groups II and IV. Restriction would appear to be improper on this basis.

# No Adequate Reason or Actual Example in Support of Restriction Between the Claims in Groups II and V Has Been Provided

No adequate reason or actual example to support restriction between the claims in Groups II and V has been provided. The Examiner has concluded that the claims of Groups II and V are distinct because, in the Examiner's opinion, the compound (of Group II) may be made employing a process different from that of Group V, and the process may be employed to prepare a different product. This reasoning is technically and factually inaccurate and logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, the bare statement that the compound may be made by a different process is not an actual example of a different process. This statement fails to explain or suggest in any way whatsoever the different steps, reagents or conditions that one would use to make the claimed compound. As a result, one has no idea whatsoever whether such a different process is even theoretically possible. Such unsupported conjecture is logically and legally inadequate to support restriction and does not provide an actual (much less plausible) reason or example to support a conclusion of distinctness.

Furthermore, Claim 74 (Group V) is drawn to a "method of making the material of Claim 21" (Group II). Based on the language of Claim 74, it is not known how the method of Group V could be used to make a material having a composition that differs from that of Claim 21 (Group II). Thus, the second reason and/or example relied upon for supporting restriction and the conclusion of distinctness is technically and factually incorrect.

Thus, the language in Claims 21 and 74 appears to have been overlooked, and no adequate reason or actual example to support restriction between the claims in Groups II and V

has been provided. As a result, the reason(s) and/or example(s) do not carry the burden of persuasion in support of the conclusion of distinctness between Groups II and V, and restriction would appear to be improper on this basis.

# The Relationship Between the Claims in Groups II and VI Has Been Mischaracterized

The relationship between the claims in Groups II and VI has been mischaracterized. The Examiner has concluded that the claims of Groups II and VI are unrelated because, in the Examiner's opinion, the compound is not required to be employed in any process of making a thin film, nor does the process require the compound of group II. This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 92 (Group VI) is drawn to a method of making an electronically functional thin film, comprising irradiating the ink of Claim 38, which in turn, comprises the material of Claim 1. The relationship and overlap between Claim 1 (Group I) and the compound of Claim 21 (Group II) has been explained in detail herein. Thus, contrary to the unsupported assertion in the Office Action, the method of Claim 92 (Group VI) is related to the compound of Claim 21 (Group II), and any conclusion of unrelatedness between Groups II and VI is technically and factually inaccurate.

MPEP §§ 806.04 and 808.01 are cited for the principle that inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. Assuming this principle is a basis for the conclusion of unrelatedness, it is clear from the language of Claims 1, 21, 38 and 92 that the conclusion is logically and legally inadequate.

Consequently, the relationship between the claims in Groups II and VI has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of the

conclusion of unrelatedness do not carry the burden of persuasion in support of restriction between Groups II and VI. Restriction would appear to be improper on this basis.

### Restriction Between Groups II and VII Is Moot

As a result of the cancellation of Claims 113-123, restriction between the claims in Groups II and VII is moot.

# The Relationship Between the Claims in Groups III and IV Has Been Mischaracterized

The relationship between the claims in Groups III and IV has been mischaracterized. The Examiner has concluded that the claims of Groups II and III are unrelated because, in the Examiner's opinion, the ink (Group III) is unrelated to the method of preparing a photosensitive material of Group IV. This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 38 (Group III) is drawn to a radiation definable ink (rather than a printing ink), comprising the material of Claim 1 (Group I). Claim 64 (Group IV) is drawn to a method of making the material of Claim 1 (Group I). Thus, it is clear that the ink of Claim 38 (Group III) is related to the method of Claim 64 (Group IV), and the reason(s) and/or example(s) relied upon for supporting restriction and the conclusion of unrelatedness are technically and factually incorrect. Restriction thus appears to be required between Groups III and IV on the mere basis that Claims 38 and 64 are different dependent claims (even though they depend from the same independent claim). As such, the conclusion of unrelatedness appears to be logically and legally inadequate.

The language of Claims 38 and 64 thus appears to have been overlooked, and the relationship between the claims in Groups III and IV has been mischaracterized. As a result, the

reason(s) and/or example(s) provided in support of the conclusion of unrelatedness do not carry the burden of persuasion in support of restriction between Groups III and IV. Restriction would appear to be improper on this basis.

## The Relationship Between the Claims in Groups III and V Has Been Mischaracterized

The relationship between the claims in Groups III and V has been mischaracterized. The Examiner has concluded that the claims of Groups III and V are unrelated because, in the Examiner's opinion, the ink (of Group III) is unrelated to the method of preparing the compound of Group V. This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 38 (Group III) is drawn to a radiation definable ink (rather than a printing ink), comprising the material of Claim 1 (Group I). Claim 74 (Group V) is drawn to a "method of making the material of Claim 21" (Group II). The relationship and overlap between Claim 1 (Group I) and the compound of Claim 21 (Group II) has been explained in detail herein. Thus, contrary to the unsupported assertion in the Office Action, the method of Claim 74 (Group V) is related to the ink of Claim 38 (Group III), and the assertion to the contrary is technically and factually inaccurate.

MPEP §§ 806.04 and 808.01 are cited for the principle that inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. Assuming this principle was a basis for the conclusion of unrelatedness, it is clear from the language of Claims 1, 21, 38 and 74 that the conclusion is logically and legally inadequate.

Thus, the relationship between the claims in Groups III and V has been mischaracterized, and the reason(s) and/or example(s) provided in support of the conclusion of unrelatedness do

not carry the burden of persuasion in support of restriction between Groups III and V. Restriction would appear to be improper on this basis.

# No Adequate Reason or Actual Example in Support of Restriction Between the Claims in Groups III and VI Has Been Provided

No adequate reason or actual example to support restriction between the claims in Groups III and VI has been provided. The Examiner has concluded that the claims of Groups III and VI are distinct because, in the Examiner's opinion, the ink of Group III is not required to be employed in the method of Group VI, nor does the method of Group VI require the use of the photosensitive ink of Group III. This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 92 (Group VI) is drawn to a method of making an electronically functional thin film, comprising irradiating the ink of Claim 38 (Group III). Based on the language of Claim 92, it would appear that the ink of Group III is required to be employed in the method of Group VI, and that the method of Group VI does require the ink of Group III. Thus, the reason(s) and/or example(s) relied upon for supporting restriction and the conclusion of distinctness are technically and factually incorrect.

The language in Claims 38 and 92 appears to have been overlooked, and no reason or example that can support the conclusion of distinctness between the claims in Groups III and VI has been provided. As a result, the reason(s) and/or example(s) given logically and legally inadequate, and they do not carry the burden of persuasion in support of restriction between Groups III and VI. Restriction would appear to be improper on this basis.

### Restriction Between Groups III and VII Is Moot

As a result of the cancellation of Claims 113-123, restriction between the claims in Groups III and VII is moot.

Page 35 of 39

### The Relationship Between the Claims in Groups IV and V Has Been Mischaracterized

The relationship between the claims in Groups IV and V has been mischaracterized. The Examiner has concluded that the claims of Groups IV and V are unrelated because, in the Examiner's opinion, the method of making a photosensitive material (Group IV) is completely unrelated to the method of making a compound (Group V). This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803. It appears that the conclusion of unrelatedness has been merely restated as a reason and/or example in support of finding the same.

For example, Claim 64 (Group IV) is drawn to a method of making the material of Claim 1 (Group I). Claim 74 (Group V) is drawn to a "method of making the material of Claim 21" (Group II). The relationship and overlap between Claim 1 (Group I) and the compound of Claim 21 (Group II) has been explained in detail herein. Thus, contrary to the unsupported assertion in the Office Action, the method of Claim 64 (Group IV) is related to the method of Claim 74 (Group V), and any assertion to the contrary is technically and factually inaccurate.

MPEP §§ 806.04 and 808.01 is cited for the principle that inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. Assuming this principle was a basis for the conclusion of unrelatedness, it is clear from the language of Claims 1, 21, 64 and 74 that the conclusion is logically and legally inadequate.

Thus, the relationship between the claims in Groups IV and V has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of the conclusion of unrelatedness do not carry the burden of persuasion in support of restriction between Groups IV and V. Restriction would appear to be improper on this basis.

### The Relationship Between the Claims in Groups IV and VI Has Been Mischaracterized

The relationship between the claims in Groups IV and VI has been mischaracterized. The Examiner has concluded that the claims of Groups IV and VI are unrelated because, in the Examiner's opinion, the method of making a photosensitive material (Group IV) is completely unrelated to the method of making a film (Group VI). This reasoning is technically and factually inaccurate, logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803. Again, the conclusion of unrelatedness appears to have been restated as a reason and/or example in support of finding the same.

For example, Claim 64 (Group IV) is drawn to a method of making the material of Claim 1 (Group I). Claim 92 (Group VI) is drawn to a method of making an electronically functional thin film, comprising irradiating the ink of Claim 38, which in turn comprises the material of Claim 1 (Group I). Thus, it is clear that the method of Claim 64 (Group IV) is related to the method of Claim 92 (Group VI), and the assertion to the contrary is technically and factually inaccurate. As a result, the reason(s) and/or example(s) relied upon for supporting restriction and the conclusion of unrelatedness are logically and legally inadequate. Restriction appears to be required between Groups IV and VI on the mere basis that Claims 64 and 94 are different dependent claims (even though they depend directly or indirectly from the same independent claim).

Thus, the language of Claims 64 and 94 appears to have been overlooked, and the relationship between the claims in Groups IV and VI has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of the conclusion of unrelatedness do not carry the burden of persuasion in support of restriction between Groups IV and VI. Restriction would appear to be improper on this basis.

### Restriction Between Groups IV and VII Is Moot

As a result of the cancellation of Claims 113-123, restriction between the claims in Groups IV and VII is moot.

Page 37 of 39

## The Relationship Between the Claims in Groups V and VI Has Been Mischaracterized

The relationship between the claims in Groups V and VI has been mischaracterized. The Examiner has concluded that the claims of Groups V and VI are unrelated because, in the Examiner's opinion, the method of making the compound (Group V) is unrelated to the method of making the thin film device of group VI. This reasoning is simply a restatement of the premise of unrelatedness as the reason and/or example supporting the conclusion for finding the same. It is technically and factually inaccurate and logically and legally inadequate, and it overlooks the language of the claims and the standards for restriction as set forth at least in M.P.E.P. §§ 802.01 and 803.

For example, Claim 74 (Group V) is drawn to a "method of making the material of Claim 21" (Group II). Claim 92 (Group VI) is drawn to a method of making an electronically functional thin film, comprising irradiating the ink of Claim 38, which in turn comprises the material of Claim 1 (Group I). The relationship and overlap between the material of Claim 1 . (Group I) and the compound of Claim 21 (Group II) has been explained in detail herein. Thus, contrary to the unsupported assertion in the Office Action, the method of Claim 74 (Group V) is related to the method of Claim 92 (Group VI). Consequently, any conclusion of unrelatedness between Groups V and VI is logically and legally inadequate.

Thus, the relationship between the claims in Groups V and VI has been mischaracterized. As a result, the reason(s) and/or example(s) provided in support of the conclusion of unrelatedness are technically and factually inaccurate and do not carry the burden of persuasion in support of restriction between Groups IV and V. In this case, the premise of unrelatedness has simply been restated as the reason and/or example supporting the conclusion for finding the same. Restriction is improper on this basis.

### Restriction Between Groups V and VII and Between Groups VI and VII Is Moot

As a result of the cancellation of Claims 113-123, restriction between the claims in Groups V and VII and between the claims in Groups VI and VII is moot.

#### Conclusions

Applicants have elected, with traverse, Group I, Claims 1-36, drawn to a radiation patternable functional material. However, in view of (1) the mischaracterization of the relationships between the claims in Groups I-VI and (2) the Examiner's failure to provide a single technically or factually accurate or logically or legally adequate reason or example in support of the conclusion of distinctness between the claims in Groups I-VI, the Restriction Requirement is improper and should be withdrawn. Thus, in view of the above amendment, election and remarks, Claims 1-112 are in condition for examination on the merits. Early notice to that effect is earnestly requested.

If it is deemed helpful or beneficial to the efficient prosecution of the present application, the Examiner is invited to contact Applicant's undersigned representative by telephone.

Respectfully submitted,

Andrew D. Fortney, Ph.D.

Reg. No. 34,600

Telephone: (559) 299 - 0128

7257 N. Maple Avenue, Bldg. D, #107 Fresno, California 93720 (559) 299 - 0128